

# **FIRE SERVICE FIELD EXTENSION PROGRAM**

## **Course Listing**

**(See below for Course Descriptions)**

<u>FF100 – Basic Firefighting</u>	FF133 – MCTO: Tactics
<u>FF110 – Regional Course Department Specific</u>	FF143 – Firefighter Safety & Survival: The Company Officer's Responsibility
<u>FF111 – Introduction to Fire Department Pumpers</u>	FF135 – Firefighter Safety & Survival: Program Implementation & Management
<u>FF112 – Pumper Hydraulics</u>	FF136 – Arson Detection for the First Responder
<u>FF113 – ISO &amp; Tanker Operations</u>	FF137 – Fire Arson Detection
<u>FF114 – SCBA Using It</u>	FF138 – Introduction to Wildland Firefighting for Structural Company Officers
<u>FF115 – Emergency Vehicle Driver Training</u>	FF139 – Recognizing & Identifying Hazardous Materials
<u>FF116 – Strategy &amp; Tactics</u>	FF140 – Hazardous Materials Incident Analysis
<u>FF117 – Flammable Gas Firefighting Tactics</u>	FF141 – Initial Response to Hazardous Materials Incidents: Basic Concepts
<u>FF118 – Instructional Techniques for Company Officers</u>	FF142 – Initial Response to Hazardous Materials Incidents: Concept Implementation
<u>FF119 – Conducting Basic Fire Prevention Inspections</u>	FF143 – Pesticide Emergencies

<u>FF120 – Building Construction I</u>	FF144 – Emergency Response to Terrorism: Basic Concepts
<u>FF121 – Building Construction II</u>	FF145 – Initial Response to Terrorism for Company Officers
<u>FF122 – Volunteer Fire Service Management</u>	FF146 – Basic Life Support & Hazardous Materials Response
<u>FF123 – Leadership I: Strategies for Company Success</u>	FF147 – Health & Safety Officer
<u>FF124 – Leadership II: Strategies for Personal Success</u>	FF148 – Managing in a Changing Environment
<u>FF125 – Leadership III: Strategies for Supervisory Success</u>	FF149 – Shaping the Future
<u>FF126 – Fire Service Supervision: Increasing Team Effectiveness</u>	FF150 – Basic Firefighting Refresher
<u>FF127 – Fire Service Supervision: Increasing Personal Effectiveness</u>	FF151 – Ventilation
<u>FF128 – Preparing for Incident Command</u>	FF152 – Incident Safety Officer
<u>FF129 – Commanding the Initial Response</u>	FF153 – Emergency Response to Terrorism: Tactical Considerations Hazardous Materials
<u>FF130 – Incident Command System</u>	FF154 – Rapid Intervention Team Operations
<u>FF131 – MCTO: Preparation</u>	FF155 – Weapons of Mass Destruction
<u>FF132 – MCTO: Decision Making</u>	FF156 – Incident Command System for Structural Collapse Incidents

### **FF100 - Basic Firefighting**

This course is a 58-hour program that is designed to provide basic fire ground skills necessary to operate and perform on the fire ground. The program is geared to volunteer firefighters and others who are unable to attend longer duration programs. The course covers selected sections of NFPA 1001: *Fire Fighter Professional Qualifications* meeting the basic skill level for the student to participate in “live” fire fighting training activities. This course is a pre-requisite for students who wish to attend the 22-hour FF101 - Live Firefighting course at the Academy.

The student will receive a certificate for Basic Firefighting upon successful completion of written and practical testing.

### **FF110 - Regional Course Department Specific**

This category is utilized for subject areas that are not covered in the established courses. TFCA Regional Instructors can provide a variety of fire service training topics that can be tailored specific to the fire departments training needs. Fire departments interested in

specialized training topics taught in their department should contact their TFCA Regional Instructor for further information on arranging a specific class.

### **FF111 - Introduction to Fire Department Pumpers**

This 15-hour course is designed to familiarize the student with the basic operation of fire department pumper apparatus. Course subject areas include types of pumps, pump operation, pump accessories, maintenance, and simplified fire ground hydraulic calculations. Classroom activities and practical application is included as part of the course.

### **FF112 - Pumper Hydraulics**

This 8-hour course is designed to familiarize the student with fire service hydraulic calculations for use in the operation of fire department pumpers. The course includes theory of fire service hydraulics, hydraulic formulas and calculations, and practical work exercises.

### **FF113 - ISO & Tanker Operations**

This course ranges in length from 15 to 57 hours depending on the particular equipment and situation of the specific fire department. The course covers the Insurance Service Office (ISO) grading schedule and requirements for tanker shuttle water supply, water supply calculations, basic tanker operations, and water shuttling. Both classroom and practical hands-on training are incorporated in the course.

### **FF114 - SCBA Using It**

This 21-hour course is designed to provide the fire department personnel with the basic knowledge and skills to safely utilize fire service self-contained breathing apparatus (SCBA). The course subject areas include understanding hazardous atmospheres and the need for SCBA, types of SCBA, donning, basic use, return to service, and inspection/basic maintenance.

### **FF115 - Emergency Vehicle Driver Training**

This 8-hour course is designed to teach the student the basics of safe driving of emergency response vehicles. The course is taught with the Volunteer Fire Insurance Services (VFIS) Emergency Vehicle Driver Training package. The course includes classroom instruction along with practical driver training exercises using the fire departments apparatus. An appropriate driver training area and fire apparatus must be provided by the fire department for the practical exercises.

### **FF116 - Strategy & Tactics**

This 18-hour program is designed to teach the student the basic principles of strategy and tactics used in fire service emergency operations. The course subject areas include

size-up, developing strategy and tactical plans, fire ground command, resource deployment, and practical exercises.

### **FF117 - Flammable Gas Firefighting Tactics**

This course ranges in length from 8 to 12 hours depending on fire department needs and available activities. The course is designed to familiarize the student with the specialized strategy and tactics required to safely handle flammable gas emergencies. Key areas of the course include flammable gas characteristics and hazards, strategy & tactics for fire and non-fire events, fire attack, and "live" firefighting scenarios.

Pre-requisites for this course are *Basic Fire & Live Fire Fighting* courses.

### **FF118 - Instructional Techniques for Company Officers**

This 15-hour course is designed to provide to the fire officer the ability to present company-training programs utilizing the four-step method of preparation, presentation, application, and testing utilizing a prepared topic. Major topics covered during the course include adults as learners, setting training objectives, using lesson plans, identifying resources, setting up classrooms, lectures, demonstrations, learning by doing, use of senses in retaining material, designing and using checklists, supervision of skills practice, coaching, guiding, evaluating, and testing.

### **FF119 - Conducting Basic Fire Prevention Inspections**

This 16-hour course is designed to provide the student with the basic knowledge necessary to conduct fire prevention inspections and to recognize potential hazards. Major topics in the course include purpose of codes, building, fire, fire prevention, and fire model codes, authority and responsibility, reports and record keeping; preparing for and conducting the inspection, basic fire safety concepts, common heating and cooking hazards, automatic sprinkler systems, and protective signaling devices.

### **FF120 - Building Construction I**

This 15-hour course is designed to enable the student to cite key features of non-combustible or fire-resistive buildings that may affect emergency operations. Fire and life safety concerns that exist in non-combustible and fire resistive structures are studied. Major topics covered in the course are the key features of non-combustible or fire-resistive structures that affect emergency operations, fire behaviors of steel and concrete are presented so that the effect of their presence in non-combustible or fire-resistive structures may be better anticipated, principles of fire spread, products of combustion, special problems with finishes and building elements, and the unique problems of conducting emergency operations in buildings under construction are studied.

### **FF121 - Building Construction II**

This 15-hour course is designed to enable the student to recognize construction types, design, alteration consequences, materials used, and their influence on the building's reaction to fire in wood and ordinary construction structures. In a tactical situation construction features and resultant potential hazards to fire fighters are studied. Major topics covered in the course are information of how construction type alterations, design, and materials influence a building's reaction to fire, principles of "fire ground" reading of a building and the value of relevant advance information about buildings are explained; building stability and resistance to fire; special hazards to firefighters and construction elements; and the determination of likely paths of fire extension.

### **FF122 - Volunteer Fire Service Management**

This 15-hour course is designed to provide volunteer fire department officers with an introduction to a practical management-training program that will allow them to apply management concepts and principles to the real world of management of their organization. Major topics covered in the course are handling problems by defining, analyzing, acting, and looking for results; authority and persuasion methods of influence; adapting between authority and persuasion; limitations of authority; role relationships; Theory X & Y; motivation; Maslow's Hierarchy of Needs; planning, organizing, and controlling; and developing policies and procedures.

### **FF123 - Leadership I: Strategies for Company Success**

This 15-hour course is designed to provide the student with leadership skills of mid-level managers, especially fire company officers. Major topics covered in the course are decision making, problem solving, brainstorming, meeting management, and understanding the relationship between resources and services provided by a fire company.

### **FF124 - Leadership II: Strategies for Personal Success**

This 15-hour course is designed to provide the student with an understanding of leadership skills and tasks associated with management of multiple roles of managers, ethics, abuse of power, and personal creativity. Major topics covered in the course are ethics, role conflict, fostering creativity and innovation in fire service organizations, and power.

### **FF125 - Leadership III: Strategies for Supervisory Success**

This 15-hour course is designed to provide the student with an understanding of basic leadership skills related to supervision of personnel. Major topics covered in the course are situational leadership, delegation, coaching, and use of discipline to correct improper employee behavior.

### **FF126 - Fire Service Supervision: Increasing Team Effectiveness**

This 15-hour course is designed to introduce the fire service managers and supervisors to basic skills and techniques that will improve their ability to relate to others in the work environment. Fire service managers will be expected to incorporate the principles of team building in their daily jobs. Major topics covered in the course are team leader's needs of fire service supervisors and program managers, manager's interpersonal skills, motivation, interpersonal communications, counseling, group dynamics, and conflict resolution.

### **FF127 - Fire Service Supervision: Increasing Personal Effectiveness**

This 15-hour course is designed to provide fire service managers and supervisors with basic supervisory skills and techniques that will improve their effectiveness as key leaders. Major topics covered in the course are basic skills and techniques that will assist the individual in improving his/her personal effectiveness, management culture, leadership managerial style and personal performance, time management, stress management, and personal professional development planning.

### **FF128 - Preparing for Incident Command**

This 15-hour course is first in the National Fire Academy's Incident Command series and is designed to prepare the fire officer for the fire ground decision-making role by stressing those factors that should be addressed before the situation. Major topics include fire behavior, safety concerns, fire loading and fire flow requirements, and pre-planning.

### **FF129 - Commanding the Initial Response**

This 15-hour course is second in the National Fire Academy's Incident Command series, and is designed to concentrate on developing and implementing an incident action plan. Emergency planning, strategy, goals and objectives, resource assignments, and accountability methods are discussed in defining the fire officer's role on the fire ground.

### **FF130 - Incident Command System**

This 15-hour course is designed to allow the student to demonstrate the need for an organized approach to managing emergency incidents, to identify laws and standards requiring this approach, to identify the elements of an effective system, and evaluate his/her department's capabilities. Major topics covered in the course are the need for organized incident management, the laws and standards requiring same, the components of such a system, relationship between business management and incident management, the NFA model of such a system, and other examples of incident management systems.

### **FF131 - MCTO: Preparation**

This 15-hour course is designed to provide the new or prospective fire officer with the basic skills and knowledge necessary to manage one or more fire companies in structural fire fighting operations. Major topics covered in the course are roles and responsibilities of the fire company officer, personal readiness, company readiness, departmental readiness, operational communications, building construction and fire behavior, and pre-incident preparation.

### **FF132 - MCTO: Decision Making**

This 15-hour course is designed to provide the new or prospective fire officer with a framework for effective structural fire fighting decision-making and tactical organization. Major topics covered are the command sequence, size-up, developing an action plan, and introduction to incident command.

### **FF133 - MCTO: Tactics**

This 15-hour course is designed to provide senior or acting company officers with the knowledge and skills needed to accomplish assigned tactics at a structural fire emergency. Major topics covered in the course are introduction to managing company tactical operations; ventilation and rescue; fire confinement and extinguishment; water supply and exposure protection; salvage, overhaul, and support activities; and private dwelling simulations.

### **FF134 - Firefighter Safety & Survival: The Company Officer's Responsibility**

This 15-hour course is designed to provide the student with an appreciation of the seriousness of the firefighter injury and death problems and to provide an awareness of techniques for reducing injuries and deaths. Major topics covered in the course are an explanation of firefighter injuries and deaths, firefighter health and fitness, safety in training, station and response preparation safety, incident safety, post-incident safety, and survival tips.

### **FF135 - Firefighter Safety & Survival: Program Implementation & Management**

This 15-hour course is designed to provide the student with an understanding of general health and safety guidelines and practices needed by firefighters. Major topics covered in the course are safety as an attitude, developing a health and safety program, laws, standards and regulations, health maintenance and physical fitness, stress, emergency scene safety, and safety investigation.

### **FF136 - Arson Detection for the First Responder**

This 15-hour course is designed to enable the student to recognize the indicators of an intentionally set fire, preserve evidence, report the information to the appropriate office, know the role of a first responder, and that the role is not to determine cause and origin



of the fire. Major topics include fire behavior, critical observations of the first responder, fire cause, scene security and evidence preservation, legal consideration, and reporting of findings.

### **FF137 - Fire Arson Detection**

This 15-hour course is designed to educate company officers and senior firefighters in the basic of fire origin and cause, including interviewing of witnesses. Major topics include defining arson, understanding the impact of arson, developing the proper mind set, on-scene collection of information and listening, initiating an investigation, defining fire, explaining the fire tetrahedron, fuel loading, fire ignition and fire patterns, understanding motives, stereotypes, the use of fire laws, proper observation while enroute, on-scene interior and exterior for structures and vehicles, wildland arson problems, burn indicators and causes, investigative responsibility, evidence preservation, scene security, note taking and court demeanor.

### **FF138 - Introduction to Wildland Firefighting for Structural Company Officers**

This 15-hour course is designed to identify safe and effective strategy and tactics to minimize harm presented by wildland fires to urban interface. Major topics covered in this course are sizing up the urban wildfire, triage of structures, safety in the urban interface, initial strategy and action, assessment of the action plan, tactics, and public relations and follow up of the incident.

### **FF139 - Recognizing and Identifying Hazardous Materials**

This 15-hour course is designed to provide the student with an opportunity to gain an insight into the methods of identifying hazardous materials. Major topics covered in this course are the definition of hazardous materials, and recognizing signs, symptoms and clues for detecting the presence of hazardous materials.

### **FF140 - Hazardous Materials Incident Analysis**

This 15-hour course is designed to provide the student with the knowledge required for effective analysis of a hazardous materials incident. Major topics covered in the course are the definition of hazardous materials, hazardous material emergencies and their outcomes, potentially dangerous assumptions, estimating likely harm, event analysis, and characteristics and behavior of hazardous materials.

### **FF141 - Initial Response to Hazardous Materials Incidents: Basic Concepts**

This 15-hour course is designed to provide the first responder with the basic concepts and techniques for appropriate behavior before, during and after the hazardous materials incident. Major topics covered in the course are introduction, regulations and standards,

personal safety, toxicology, site management and scene set-up, personal protective equipment, decontamination, and resources.

### **FF142 - Initial Response to Hazardous Materials Incidents: Concept Implementation**

This 15-hour course is designed to give the first responder an understanding of the basic steps of a systematic process for a safe and appropriate response to hazardous materials incidents including identifying the types, uses, and sources of information needed to recognize and identify the hazard, and identifying the basic options, requirements, and limitation of the methods used to control, contain, or confine a hazardous materials incident. Major topics covered in the course are estimating the potential course and harm of the incident, determining strategic goals, assessing tactical options, and planning and implementing actions, examinations, and reviews.

### **FF143 - Pesticide Emergencies**

This 15-hour course is designed to provide local emergency responders with the knowledge to handle a pesticide fire or spill safely. Major topics covered in the course include different skills, tactics, and knowledge required for pesticide emergencies, importance of pesticide label definitions of pesticide, fungicide, insecticide, herbicide, and rodenticide, how pesticides enter the body, signs, symptoms, and treatment of pesticide poisoning, precautions, information resources, environmental pollution, incident command, spill control, fire control, decontamination, and pre-emergency planning.

### **FF144 - Emergency Response to Terrorism: Basic Concepts**

This 15-hour course is designed to prepare first responder personnel to take the appropriate course of action at the scene of a potential terrorist incident. Major topics for this course include understanding and recognizing terrorism, defensive considerations, command and control issues, self-protective measures, scene security, notifications, and smooth transition from emergency to recovery to termination operations.

### **FF145 - Initial Response to Terrorism for Company Officers**

This 15-hour course is designed to provide first-on-the-scene supervisors with the necessary knowledge and skills to establish initial command of emergencies involving potential terrorism events. This course builds upon the existing knowledge and skills obtained in the *Emergency Response to Terrorism: Basic Concepts* course. Students must have a working knowledge of the Incident Command System (ICS). Major topics covered in this course are recognition of the signs of terrorism, scene security, use of the incident command system, unusual circumstances related to terrorist activities, self-protection, and information search.

### **FF146 - Basic Life Support & Hazardous Materials Response**

This 15-hour course is designed to provide an overview of critical concerns for emergency medical responders at hazardous materials incidents, including toxicological aspects associated with hazardous material incident response. Major topics covered during this course are safety issues for EMS-hazardous material response teams, managing contaminated victims, decontaminating and treatment procedures at basic life support level, transportation and receiving facilities, and compliance/understanding of federal regulations regarding hazardous materials response.

### **FF147 - Health & Safety Officer**

This 18-hour course is designed to examine the health and safety officer's role in identifying, evaluating, and implementing policy and procedures that affect the safety and health of emergency responders. Major topics covered during this course are the role of the safety and health officer, the laws, standards, and regulations, health maintenance, accident investigation, and post-incident examination.

### **FF148 - Managing in a Changing Environment**

This 15-hour course is designed to develop strategies for managing with a changing economic, social, cultural, political, and technological environment. Major topics presented during the course include economic influences, trends, and conditions, influential social factors, legal impacts on the function of the organization, political environment, trends, condition, and influences, technological changes and new technologies.

### **FF149- Shaping the Future**

This 15-hour course is designed to identify creative approaches to problems, create group problem-solving methods, quantify problems and solutions, and develop strategies to implement change. Major topics include utilizing the environmental scanning process to identify existing or potential organizational problems, analyzing the effect of paradigms on creative problem identification, bench marking, barriers to creativity, quantifying problems, cost-benefit, resistance to change, agents for change, and implementing change.

### **FF150 – Basic Firefighting Refresher**

This 12-hour course is designed to provide refresher training in basic fire ground skills necessary to operate and perform on the fire ground. The program is geared for fire service personnel who have previously completed *FF-100 – Basic Firefighting* or *F102 – Basic/Live Firefighting* and *F110* or *FF101 – Live Firefighting* courses at TFACA. The course reviews selected sections of NFPA 1001:Fire Fighter Professional Qualifications meeting the basic skills level for the student to participate in “live” firefighting training activities.

### **FF151 - Ventilation**

This 15-hour course is designed to educate firefighters and officers in basic and advanced ventilation techniques used in structural fire fighting operations. The course covers natural and mechanical ventilation methodology with emphasis on the latest techniques and concepts including positive pressure ventilation. The class includes lecture, demonstration, and hands-on student activities.

### **FF152 – Incident Safety Officer**

This 15-hour course examines the Safety Officer's role at emergency response situations. A specific focus on operations within an Incident Command System (ICS) as a Safety Officer is a main theme. The student will be able to identify and analyze concerns as they relate to all-hazards scene evaluation, and communicate recommended solutions to the command authority.

### **FF153 – Emergency Response to Terrorism: Tactical Considerations Hazardous Materials**

This 15-hour course is designed for the first responding hazardous materials technician or persons who have the responsibility of developing initial hazardous materials tactical considerations. The students will be trained in security considerations, identifying signs of terrorism, anticipating unusual response circumstances, assessing information, and initiating self-protection actions. They also will apply their knowledge about responding to a terrorist event, managing site safety, documenting the event and debriefing personnel.

Course prerequisites are the completion of the following courses: *FF140 Hazardous Materials Incident Analysis* or *FF141 Initial Response to Hazardous Materials Incidents: Basic Concepts*, and either the *FF144 Emergency Response to Terrorism: Basic Concepts* or the *FF145 Initial Response to Terrorism: Company Officer*.

### **FF154 – Rapid Intervention Team Operations**

This 20-hour course is a comprehensive program designed to prepare experienced firefighters for the difficult job of rescuing other firefighters from a structure fire incident. The course emphasizes the importance of Rapid Intervention Teams (DIT) being composed of veteran, well trained, and physically fit firefighters. Major course topics include: MAY-DAY procedures; Rapid Intervention Team search techniques; downed firefighter assessment; air changeover procedures; drags and carries; extrication; 2:1 lowering systems; sub-level rescues; ladder rescues; the "Denver" drill; the "Pittsburgh" drill; communications; and accountability. The first four hours of the class are classroom with the remaining 16-hours consisting of hands-on practical training.

This course requires a high degree of physical fitness and the ability to cope with physically and mentally demanding situations. Course prerequisites are a minimum of three years of active fire service experience; completion of either *FR100 Smoke Divers*

or *FF114 SCBA Using It*; and one of the following courses - *F100 Recruit Firefighter 1 Course*; *F102 Basic/Live Firefighting*; or *FF100 Basic Firefighting & FF101 Live Firefighting*. Note: Due to equipment and logistical requirements to conduct this program, this class can only be conducted at selected locations.

### **FF155 - Weapons of Mass Destruction**

This 15-hour course is design to provide the student with the knowledge required to identify the signs of weapons of mass destructions before and after the incident. Major topics covered are potential harm of the incident, determining strategic goals, assessing tactical options, and planning and implementing actions, examinations, and reviews of the incident.

### **FF156 - Incident Command System for Structural Collapse Incidents**

This 16-hour course is designed to provide fire officers with an understanding of command operations at structural collapse incidents. Students completing this course will be able to: describe the aspects of a structural collapse; explain basic command procedures and the ICS organizational structure; identify critical factors and issues that affect scene management; describe unique operational considerations; describe response operations phases; describe the technical rescue expertise and equipment required for safe operations and effective incident management. Students attending should understand and be able to apply the Incident Command System concept. This course is geared toward fire command officers.